JMSRR Overview for NASM Technical Interchange Meeting

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Briefing Outline

- **JMSRR Components**
- **How Does it Fit Together**
- **Responsibilities**

JMSRR Components

What Is JMSRR ?

- **The JMSRR in the JSIMS Environment has been defined as the storage mechanism, for all data for the JSIMS project**.
- **The JMSRR is the sum total of its nodes, bound together with metadata. The nodes that make up the JMSRR are :**
  - Metadata Nodes, supplied by the I&D Contractor
  - The Content Libraries, supplied by the Development Agents (DAs)
  - Other Databases as required by the Requirements Traceability Matrix.

JMSRR Metadata Node

- **The Metadata Nodes are Objectstore databases and will store all the metadata for the JMSRR.**
- **A Master Metadata Node will reside at the I&D JIF, which will contain the configuration managed metadata supplied by DAs or owners of other databases.**
- **The Master Metadata Node will have a capability to update the Metadata Nodes, located at the deployed sites, to keep them current and reduce the overhead associated with configuration management of the metadata throughout the JMSRR.**

JMSRR Content Libraries

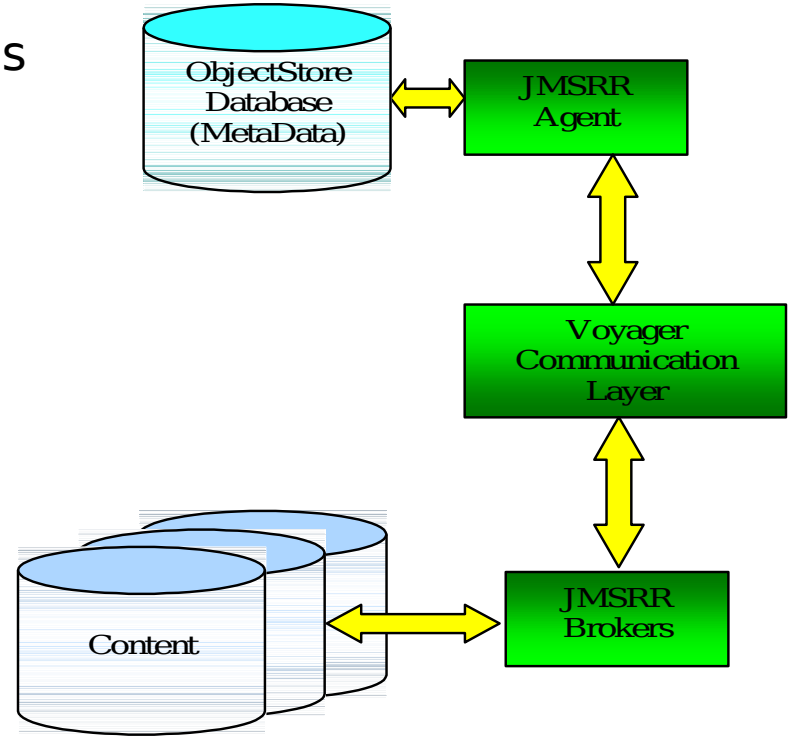
- **The Content Libraries, can be any type of format.**
  - Such formats could be Oracle, Informix, flat files, custom databases, etc..
  - The retrieval/access mechanism from the content libraries, or from other databases, to the JMSRR can be one of the four basic types: an ODBC interface, HTTP engine, FTP gateway, or a custom programmatic interface (delivered by the database owner).
  - The data that resides in the content libraries can range from software source code, initialization data from source libraries, terrain information, to AARs
- **The DAs or owners of other databases are responsible for providing the metadata for their content, but are not responsible for storing the metadata**

JMSRR Metadata

- **Metadata is data about data.**
- **There are two categories of metadata: Technical and Composition.**
  - Technical metadata is the description of the data needed by various tools to store, manipulate, and move the data.
  - Composition metadata is the description of the data needed by the exercise designer to understand the model context and meaning of the model.
- **Metadata will be unclassified**
  - **JSIMS Communique, dated 9/19/97**
    - Subject: Unclassified Metadata in the JMSRR
    - From: Dave Walker
  - **All DAs, to include Intel, still concur**

JMSRR Components

- **The JMSRR is comprised of five components**:
  - The Metadata node (Objectstore)
  - The transport layer (Voyager)
  - The agent and brokering software developed by the JMSRR IPT
  - The content libraries

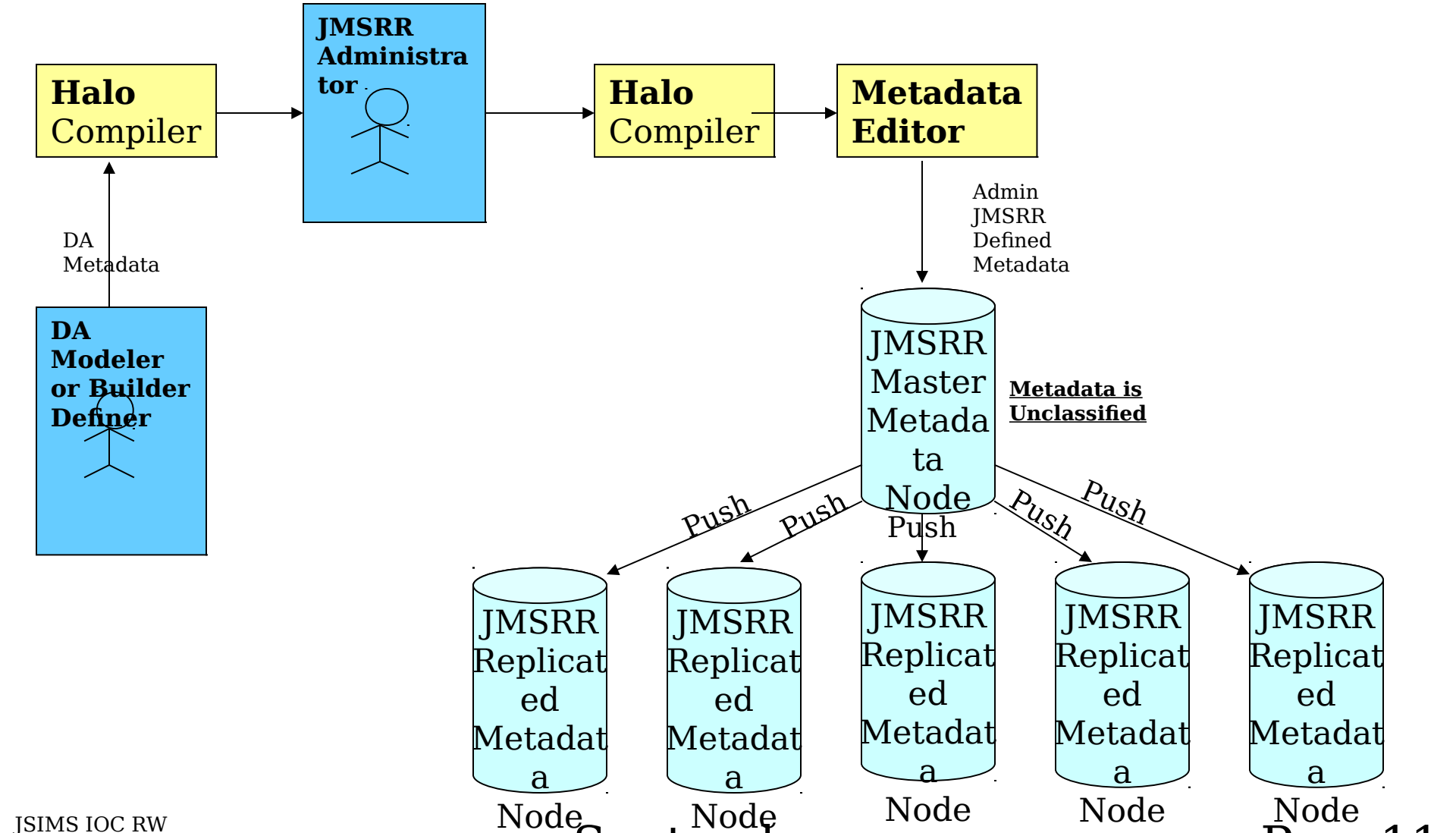


What is the JMSRR IPT Developing?

- **The JMSRR IPT is responsible for the design, development, implementation, test, and maintenance of the software for the Repository Management Tools, and Support Service Applications.**
  - Repository Management Tools support the control and use of the JMSRR.
  - Support Services Applications support query, search, cataloging, and management of the metadata.
- **IAW the SOW for the JMSRR IPT: "The JMSRR will be geographically distributed with multiple segments and owners."**

How Does it Fit Together

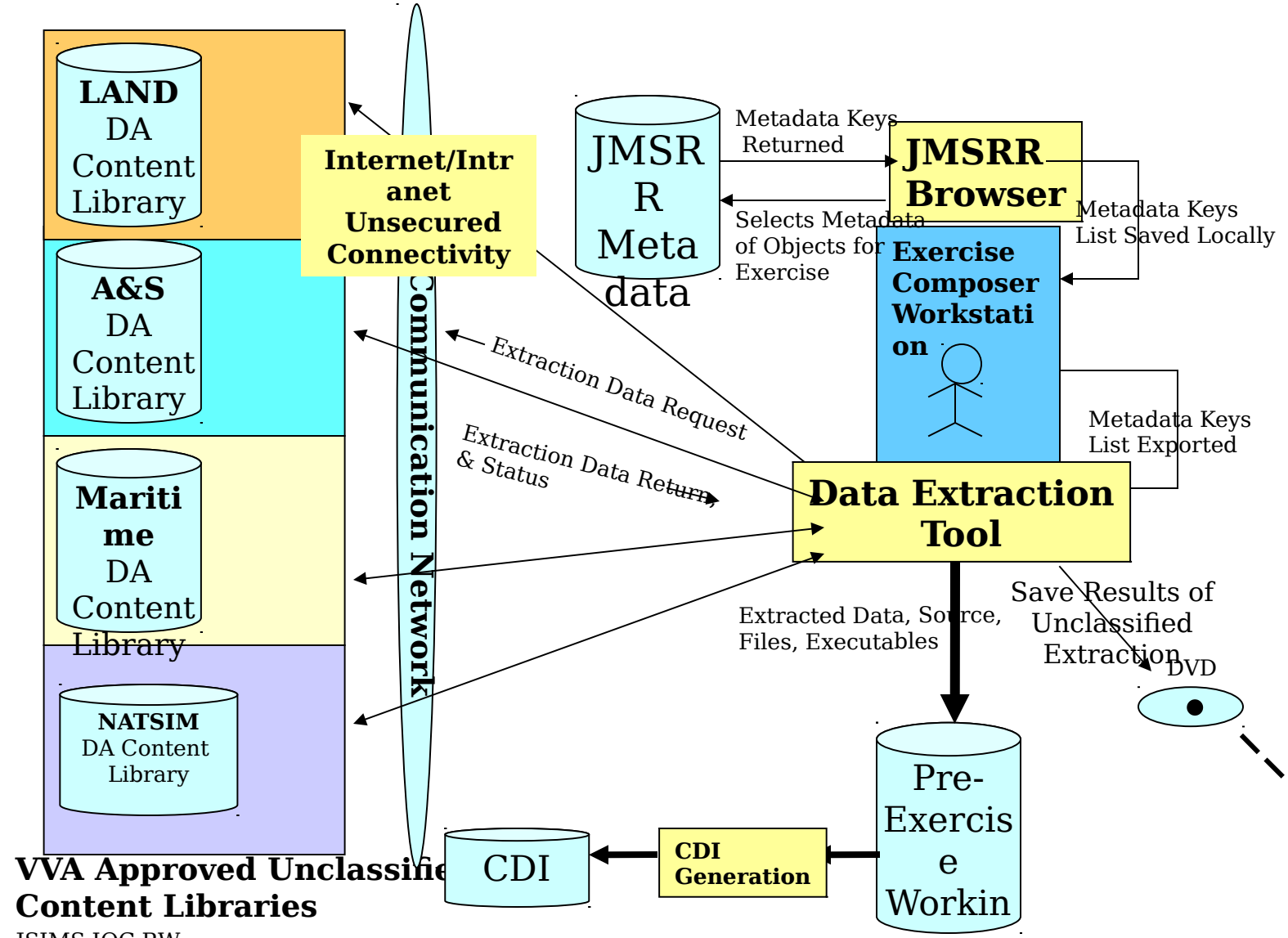
Developing Metadata and Populating the Metadata Nodes



Pre-Exercise Extraction Process

Unclassified

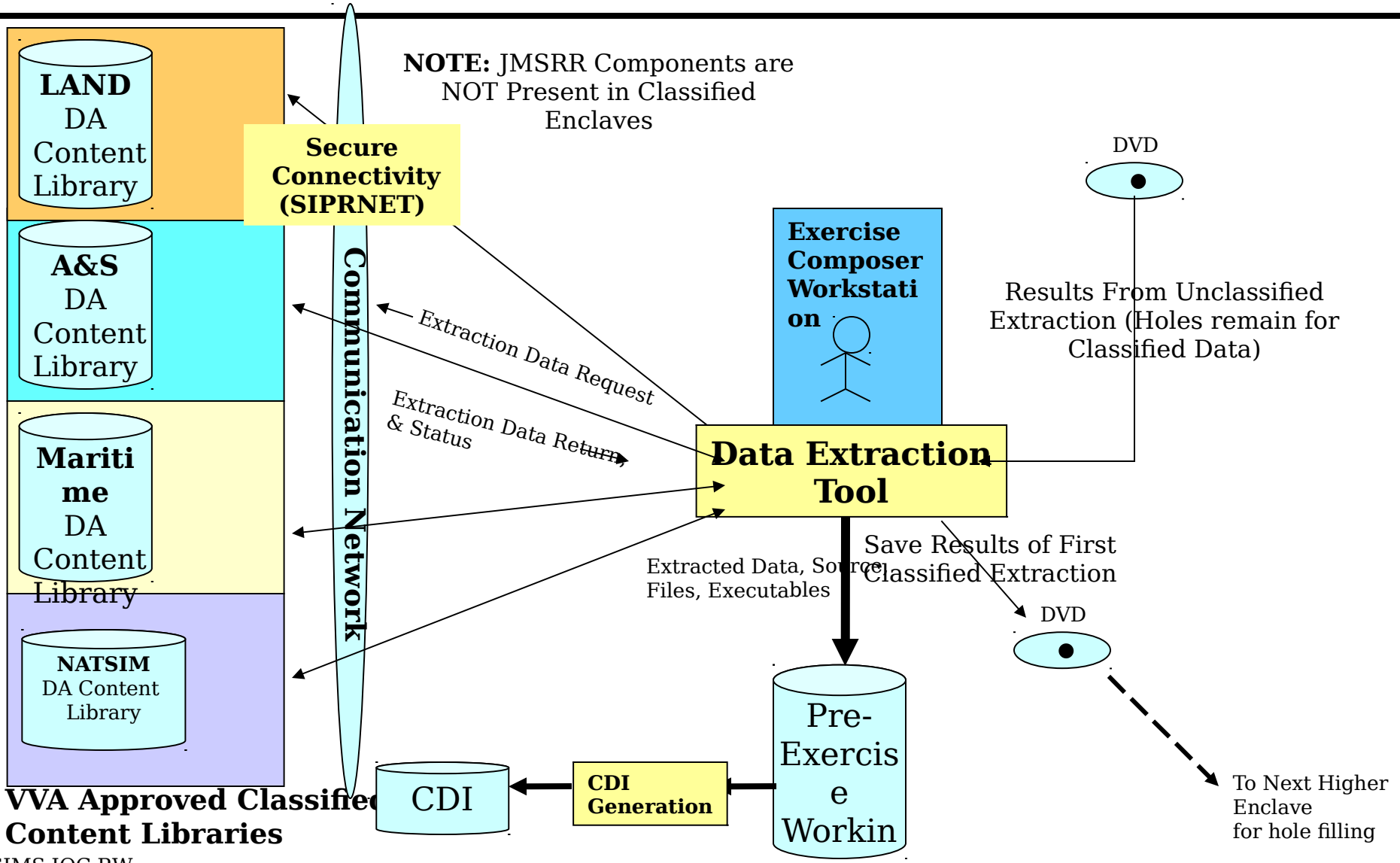
JSIMS



VVA Approved Unclassified Content Libraries

Pre-Exercise Extraction Process
Classified

JSIMS


LAND DA Content Library
A&S DA Content Library
Maritime DA Content Library
NATSIM DA Content Library
VVA Approved Classified Content Libraries
Secure Connectivity (SIPRNET)
Communication Network
NOTE: JMSRR Components are NOT Present in Classified Enclaves
Exercise Composer Workstation
Extraction Data Request
Extraction Data Return & Status
Data Extraction Tool
DVD
Results From Unclassified Extraction (Holes remain for Classified Data)
Extracted Data, Source Files, Executables
Save Results of First Classified Extraction
DVD
To Next Higher Enclave for hole filling
Pre-Exercise Workin
CDI Generation
CDI

Responsibilities

Responsibilities

- **JMSRR IPT (I&D):**
  - The I&D JMSRR IPT is responsible for the design, development, implementation, test, administration and maintenance of software for the JMSRR Repository Management Tools and Support Services Applications.
    - The Repository Management Tools will be developed to support the control and use of the JMSRR and include access/ownership control, security, and version control.
    - Support Services Applications will also be developed to support query and search services for the distributed repository; applications that provide configuration management of the distributed repository, and cataloging applications for the management of metadata within the repository.
  - HALO language definition and compiler

Responsibilities

- **DA's and Owner's of Other Databases:**
  - The Developers of the models and/or owners of databases are responsible for developing the metadata that describes their products (database contents) using HALO. The HALO descriptions are then "registered" with the JMSRR and stored in the metadata node. The Developers of the models or owners of databases are not responsible for storing the metadata.
  - The DAs, to include the Joint DA, are responsible for storing, security, configuration managing, and maintaining their MSOs or other data.